S/045/0041
Leslie 7334

Leslie Heppler <lheppler@utah.gov>

GRM Plan

1 message

Garahana, Larry <lgarahan@blm.gov> Tue, Apr 26, 2016 at 1:01 PM
To: Leslie Heppler <lheppler@utah.gov>

Here is GRMs Plan and approval letter. You will be receiving a copy of the letter in the mail also.

Thanks Leslie.

Larry

Larry Garahana PG
Geologist
Salt Lake Field Office
2370 S Decker Lake Blvd
West Valley, Utah 84128
801-824-1519 (cell)
801-977-4371 (office)

2 attachments

plan_approv_letter_042516.pdf
434K

GRM_Final_Mine_Plan_042516.pdf
3900K

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
West Desert District Office
2370 South Decker Lake Blvd.
West Valley City, Utah 84119
ph: (801) 977-4300; Fax: (801) 977-4397
www.ut.blm.gov/saltlake_fo

APR 2 6 2016

In Reply Refer To:
3809(UTW011)
UTU-90510

CERTIFIED MAIL NO.- 7014-2120-0003-7880-1918
RETURN RECEIPT REQUESTED

DECISION

Gold Rush Metals LLC :
Attn: Jon Rush : Suface Management
320 East State Street :
Orderville, Utah 84758

PLAN OF OPERATOPNS APPROVED – CONDITIONS OF APPROVAL REQUIRED OPERATOR COMMITTED ENVIRONMENTAL PROTECTION MEASURES STATED DETERMINATION OF FINANCIAL GUARANTEE AMOUNT

The Plan of Operations for Gold Rush Metals LLC (GRM), Fraction Lode, Fraction Lode 2 and the Tuolumene Mine is hereby approved subject to conditions of approval and operator committed and environmental protection measures listed below. GRM must conduct operations as described in the Plan of Operations and in accordance with the following Bureau of Land Management (BLM) conditions of approval (COA) and operator committed environmental protection measures:

Conditions of Approval:

1. During operations in the project area, the operator or its contractors shall:
    a. Operate all internal and external combustion engines (including off-highway vehicles, generators, heavy equipment, etc.) with a qualified spark arrester that is maintained and not modified.
    b. Maintain and clean all equipment regularly to remove flammable debris buildup.
    c. Carry shovels, water, and fire extinguishers that are rated at a minimum as ABC - 10 pound on all equipment and vehicles.
    d. When welding, grinding, cutting or conducting other similar, spark producing work, choose and area large enough to contain the sparks that is naturally free of all flammable vegetation or remove the flammable vegetation in a manner compliant with the permitted activity.
    e. Initiate fire suppression actions in the work area to prevent fire spread to or on federally administered lands. If a fire spreads beyond the capability of workers with the stipulated tools, all will cease fire suppression action and leave the area immediately via pre-identified escape routes.

f. Immediately Call 911 or immediately notify the Northern Utah Interagency Fire Center at 801-495-7611 of the location and status of any escaped fire, AND immediately notify the BLM Salt Lake Field Office at 801-977-4300 of the incident.

This COA is needed to ensure every measure will be taken to prevent the initiation of a fire on-site that could spread to or on federally admininstered lands.

2. BLM must approve the location of additional signs, fences or structures prior to placement on the ground within the project area. The surface occupancy of the proposed Scheelite Mine Project meets the conditions specified in the applicable regulations (43 CFR 3715). The BLM is in concurrence with the occupancy of the subject lands. GRM must continue to comply with the 43 CFR 3715 Regulations.

3. The gravel that may be needed to construct the haul road may need to be purchased from an outside source to accomplish the specification requirements for construction of a road that will safely withstand the proposed mining activity. Any material needed from outside the permitted area on BLM land will need to be purchased as per 43 CFR §3601.

4. The operator shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands. The operator shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery.

5. The following seed mix will be used for all disturbed areas as described in the EA:

Species	**Scientific Name**	**Lbs/acre Drilled**	**Lbs/acre Broadcast**
Siberian Wheatgrass, Vavilov	*Agropyron fragile*	2.4	4.8
Pubescent Wheatgrass, Luna	*Thinopyrum intermedium*	1.6	3.2
Crested Wheatgrass, Hycrest	*Agropyron cristatum*	1.7	3.4
Russian Wildrye, Bozoisky	*Psathyrostachys juncea*	1.5	3.0
Forage Kochia, Immigrant	*Bassia Prostrata*	0.3	0.6
Small Burnet, Delar	*Sanguisorba minor*	0.8	1.6
Alfalfa, Ledak	*Medicago sativa*	0.8	1.6
Wyoming Big Sagebrush, Wyoming	*Artemisia tridentata wyomingensis*	0.1	0.2
TOTAL		9.2	18.4

Operator Committed Environmental Protection Measures:

1. Access to the mine from Gold Hill RD is by a BLM dirt road. The road will be widened by 2 feet to a total width of 10 feet from the county road to the mine-site. Two to three safety turnouts will be constructed from the county road to the mine-site. The road will also be upgraded with gravel, ditches, waterbars and berms. The road will be constructed and maintained to handle the type of vehicles associated with the mining activities of this project on a year round basis.
2. A lockable gate with signage will be installed at the Tuolumene patented mining claim to prevent public access to the mine area during operations.

3. Two temporary structures will be erected at the mine area: 3 20' Connex storage containers and a 14'x 20' shop framed between Connexs.
4. Historic wooden ore bin structure and the other three isolated finds at the site will be avoided during all phases of mining activities.
5. There will also be two explosive magazines on site. During interim management these magazines will be removed from the site.
6. Prior to placing any waste rock material from this mining operation on BLM land, GRM will have a certified independent laboratory test the waste rock by EPA analytical method SW6020 (inductively coupled plasma mass spectrometry, ICP-MS) and method SW9045 (pH). Sampling will be completed prior to placing any waste rock on BLM administered lands and quarterly thereafter. The sampling frequency may be increased or decreased depending on previous sampling results. BLM will not approve the lab, but only verify that it is a certified lab capable of the required test needed.
7. The operator will have and maintain a spill prevention plan.
8. GRM will dispose of all solid waste generated from the mining operations conducted at their mining and milling sites at an approved waste disposal facility. At no time will GRM burn, bury or dispose of solid waste on BLM land.
9. Water for dust suppression in the mine and on the access road will be hauled from the private mill location to the mine daily and stored in 2 - 5,000-gallon water storage tanks. Drinking water is provided by bottled-water systems at the mine. In the event that mine employment increases to 25 or more employees, a potable water system will be installed for bathrooms and showers, as required by state law. This system could be supplied by additional water storage tanks filled with water trucked from the Callao Mill.
10. All roads at the mine are pre-existing and will be reclaimed as per BLM and DOGMs requirements upon the closure of the mining operations. The requested 2 feet widening of the access road and road disturbances at the mine site will be seeded using the BLM approved seed mix. All slopes created by mining activities will be graded to achieve reclaimed slopes of 3H:1V or less steep, with the exception of the mine portals which will be graded to 2H:1V slopes. Compacted areas will be ripped on contour to a depth of 12 inches (in accordance with UAC rule R647-4-110.5(b)). Due to the existing surface disturbance from previous mining, GRM will contour any disturbed areas to a natural topography and spread any saved growth medium over the graded slopes and scarified on contour and seeded. Best management practices, such as stone check dams, silt fence straw waddles, or hay bales will be installed during reclamation to mitigate erosion until vegetation/stability has been established.
11. The waste rock area will be graded, ripped, covered with any available growth medium, and seeded with the BLM approved seed mix.
12. The ore stockpile area will be graded, ripped, covered with any available growth medium, and seeded with the BLM and DOGM approved seed mix. Care will be taken on the waste pile to limit scarification to the growth medium and not penetrate the underlying waste rock.
13. In order for reseeding to be considered successful a minimum of 70 percent of the pre-mining vegetative ground cover shall be established. All disturbed areas that will need to be seeded will follow the seed mix species and amounts contained in COA, number 4 above, Table 4, section 2.2.2, of the EA and page 2 of the EA, Decision Record.
14. After reclamation is completed, post-closure monitoring and maintenance is anticipated to take 3 to 5 years.

15. Qualified personnel will inspect the stationary equipment, mine areas and access road on a monthly basis, at a minimum, during active mine operations and post-mining for compliance with the plans and specifications. Stormwater inspections will be performed biannually or during periods of temporary closure.

16. When the mine is on standby, fuels and other petroleum products will be removed from the site thereby eliminating the need for monthly inspections.

17. GRM will maintain records of on-site and transportation-related wildlife mortality if any occur and will contact the BLM authorized officer as soon as possible to report the incident.

18. In the event of a temporary shut-down or closure of the mine operations six months or longer, a biological survey will be conducted by a qualified biologist prior to the mine reopening to assure there would be no conflicts with migratory birds, TECS or any other wildlife in general. Biological surveys for the areas of future disturbance(s), including future development areas that are not yet disturbed will be performed prior to construction when specific areas of future disturbance are identified.

19. In the event that market conditions or other circumstances require a temporary closure of mine operations, GRM will provide notice to the BLM in accordance with the requirements of 43 CFR Part 3802.4.7. During non-operating periods, GRM will maintain the project area and access road in accordance with their interim management plan identified in section 6 of their Plan submission dated April 2016.

20. The following preventive measures have been implemented and will be continued to prevent the spread of noxious/invasive plants during construction and future operations and maintenance activities:

    - Prior to construction, GRM and its contractors will be trained on methods for cleaning equipment, identification of problem plant species in the project area, and procedures to follow when an invasive or noxious weed is located. To assist in identification, construction personnel will be supplied with a list and pictures of noxious and invasive species that may exist within the project area.

    - Prior to any construction disturbance, all known noxious weed populations will be flagged so that they may be avoided.

    - Prior to entering the project area, vehicles and equipment will be cleaned by manual methods or forced air of all mud, dirt, and plant parts where there is a potential to import weeds. This will be done to remove weed seed that may be attached to this equipment. Dry washing will occur at designated sites that include appropriate containment systems.

    - Equipment, materials, and vehicles will be stored at specified work areas or construction yards. All personal vehicles, sanitary facilities, and staging areas will be confined to a limited number of specified weed-free locations to decrease chances of incidental disturbance and spread of noxious weeds and invasive plants.

    - Disturbed areas will be promptly seeded following completion of activities to reduce the potential for the spread and establishment of noxious weeds and invasive plants. Seeding should occur as soon as possible following the disturbance activities and during the optimal time period. Only DOGM/BLM-approved mixtures of certified "weed-free" seed will be used. All other introduced materials used for the mining activities, such as straw and fill, will also be certified weed-free.

- Should problematic weed infestation areas occur on site during any phases of the mining operation, GRM will confer with the BLM and the County regarding the appropriate control measures to be implemented.

These operator committed environmental protection measures are needed to ensure every measure will be taken to prevent undue and unnecessary degradation on BLM land.

Financial Guarantee

Based on your reclamation cost estimate, the BLM review of the cost estimate, and consideration of the above conditions of approval, the required financial guarantee amount is hereby set at $55,700 for reclamation of the Fraction Lode, Fraction Lode 2 and the Tuolumene Mine. You must provide a financial guarantee in this amount using one or more of the acceptable financial guarantee instruments listed under 43 CFR 3809.555. The Utah Division of Oil, Gas and Mining currently holds a reclamation bond in this amount for this project and the BLM Utah State Office, Solid Minerals Adjudication Team will issue you a decision as to the acceptability of your financial guarantee once they determine it satisfies the BLMs requirements in 43 CFR 3809.570 and 3809.571. You must not begin activities under the approved Plan of Operations until you receive notification from the BLM Utah State Office that the financial guarantee has been accepted and obligated.

Approval of a Plan of Operations by the BLM does not constitute a determination regarding the validity or ownership of any unpatented mining claim involved in the mining operation. GRM is responsible for obtaining any use rights or local, state, or Federal permits, licenses, or reviews that may be required for the operation.

This decision also constitutes concurrence with GRM's use and occupancy of public lands as described in the approved Plan of Operation. GRM must maintain compliance with the Use and Occupancy regulations at 43 CFR 3715.2, 3715.2-1, and 3715.5 throughout the duration of the approved Plan of Operations. Concurrence by the BLM on GRM's proposed use and occupancy is not subject to State Director Review, but may be appealed by adversely affected parties directly to the Interior Board of Land Appeals as outlined in enclosed BLM Form 1842-1.

Appeal of a Decision under 43 CFR 3809

If you are adversely affected by this decision, you may request that the BLM Utah State Director review this decision. If you request a State Director Review, the request must be received in the BLM Utah State Office at 440 West, 200 South, Suite 500, Salt Lake City, Utah 84101, no later than 30 calendar days after you receive this decision. The request for State Director Review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director Review is pending, unless a stay is granted by the State Director. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the Interior Board of Land Appeals (IBLA). You may contact the BLM Utah State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with the Salt Lake Field Office, located at 2370 South Decker Lake Blvd., West Valley City, Utah, 84119 which we will forward to IBLA.

If you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations at 43 CFR 3809.801(a)(1). Your Notice of Appeal must be filed in this office at 2370 South Decker Lake Blvd., West Valley City, Utah, 84119 within 30 days from receipt of

this decision. As the appellant you have the burden of showing that the decision appealed from is in error. Enclosed is BLM Form 1842-1 that contains information on taking appeals to the IBLA.

This decision will remain in effect while the IBLA reviews the case, unless a stay is granted by the IBLA. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Request for a Stay

If you wish to file a petition pursuant to regulations 43 CFR 4.21 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by Interior Board of Land Appeals (IBLA), the petition for a stay must accompany your Notice of Appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of this Notice of Appeal and petition for a stay must also be submitted to each party named in the decision and to the IBLA and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal must show sufficient justification based on the following standards:

1. The relative harm to parties if the stay is granted or denied.
2. The likelihood of the appellant's success on the merits.
3. The likelihood of immediate and irreparable harm if the stay is not granted.
4. Whether the public interest favors granting the stay.

If you have any questions, or require additional information, please contact Larry Garahana of my staff at (801) 977-4371.

Sincerely,

Kevin E. Oliver
District Manager

Enclosure: Form 1842-1 Information on taking appeals to the IBLA

cc: UDOGM
Leslie Heppler
1594 West, North Temple, Ste. 1210#
Box 14580, SLC, UT 84114-5801

UT923 - Opie Abeyta

PLAN OF OPERATIONS

GOLD RUSH METALS L.L.C.

FRACTION LODE, FRACTION LODE 2,

AND TUOLUMENE MINE

GOLD HILL, UTAH

Prepared for:

Gold Rush Metals L.L.C.

April 2016

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Section 1 Introduction

1.1 Purpose

This mine plan addresses proposed surface disturbance on federal lands administered by the U.S. Bureau of Land Management (BLM). The purpose of this plan is to:

- Provide Operator Information
- Include a Description of Operations and Reclamation
- Have a Monitoring Plan for the Operation
- Describe an Interim Management Plan for periods of temporary closure
- Provide a Reclamation Cost Estimate

These proposed surface disturbing activities are an unfortunate by product of mining activities, and are located on Federal lands administered by the BLM. Therefore, BLM approval of a Plan of Operations (Plan) as set forth at 43 Code of Federal Regulations (CFR) 3809 is required before Gold Rush Metals L.L.C. (GRM) can commence the proposed activities.

1.2 Background

The existing mine:

- Fraction Lode Unpatented Mining Claim - 78504
- Fraction Lode #2 Unpatented Mining Claim - 78505
- Tuolumene – Patented Mining Claim 4386

Hereto referred as "The Mine" Are located on Dutch Mountain, which is part of the Gold Hill Mining Area in northwestern Utah. The project is located approximately 3.4 miles northwest of Gold Hill, Utah in western Tooele County. The mine is accessed from Gold Hill, Utah by heading west on Upper Gold Hill Road for approximately 1.15 miles, and turn right on to the dirt road that leads to the Mine. Approximately .5 miles past the turnoff, there is a fork in the road. The road on the right leads to the Fraction Lode, Fraction Lode #2, and Tuolumene (1.7 miles up the road).

GPS coordinates of the mine are:

- Fraction Lode – Latitude 40°11'43.03"N, Longitude 113°50'57.31"W

These coordinates are marked as planned mine entrance.

The mine that was previously mentioned is a Scheelite mine that is leased to Gold Rush Metals L.L.C (GRM), who holds the claims and other project assets. GRM acquired these claims in January 2014, and has been working with its sister company Scheelite Metals L.L.C.

The area proposed for the mining activity in this Plan has had previous mining conducted at this location at least twice in the past prior to BLM regulations. Due to the prior mining and lack of any reclamation at this location, the surface proposed for this mining project is almost entirely void of any vegetation and topsoil or growth medium. The proposed mining activities will be conducted entirely on previously disturbed ground and no additional surface disturbance is anticipated at this time for this project. Reclamation and re-vegetation of this project will be discussed in later sections of this Plan.

A geological review and assessment was conducted for GRM by Geologist, B. Tom Clark, on January 18, 2016 (Attachment 8). It states:

> Most all of the tungsten mineralization on Dutch Mountain is the result of intrusive contact metamorphism and metasomatism of carbonate sediments. This process is also referred to as a contact skarn or tactite mineralization. This process has produced tungsten ore when a favorable igneous rock has intruded a favorable carbonate rock with sufficient heat and pressure to introduce tungsten hydrothermal solutions from the intrusive. Thus all the tungsten ore is located along the sedimentary/intrusive rock contacts on the Property. The quartz monzonite is the favorable intrusive and the Ochre Mountian Limestone appears to be the most favorable carbonate formation although some tungsten mineralization is found along the Orr Formation contact and Ely Limestone contact on the Property. The tungsten mineralization developed within the most favorable carbonate beds and zones within these formations and although some favorable zones may be found in all of these formations the most favorable zones appear to be found in the Ochre Formation.

It also goes on to state that Timm mine was worked in 1942-1944 and 1954-1955, and total production was 1,843 tons of ore, producing 3,047 units of WO_3.

1.3 Planned Mine Development

The proposed surface disturbing activities described in this Plan are based on existing exploration data on scheelite mineralization. Projected extensions are forward-looking and subject to change based on geological findings and market conditions. Surface disturbances associated with the planned mine development will be 4.5 acres for the mine area and 1 acre for improvements to the access road, totaling 5.5 acres of disturbance. As mentioned in section 1.2, this area has been previously mined and there will be no new surface disturbance associated with this project at this time. Without further exploration drilling and mining, GRM can only predict mining activity for the next 2 years; however, 10 years of projected mining is proposed in this Plan.

It is GRMs intention to establish a portal entrance on the north side of the old wooden ore chute for the underground extraction of the tungsten ore. GRM is planning to accomplish this by digging a level channel from the face of the existing high-wall out to the north side of the old wooden ore chute and burying several steel-sets with any overburden or existing material within the pit area to eventually create an artificial adit and better access for the removal and hauling of the ore from the mine site.

Operations would consist of bringing the mined ore and any waste rock out of the portal with a 2 cubic yard mucker, where the ore would be stockpiled and loaded into trucks for transport to an off-site mineral processing facility, and any waste rock would be back-filled in the existing pit to aid in the final reclamation of the pit.

There will be no on site physical or chemical processing of the ore at the mine; accordingly, no tailings or processing chemicals are generated on site. Ore produced at the mine is shipped to an off-site processing facility at the Callao Mill site, (Township 9 South, Range 17 West, Section 25, Corners North West South East) located 9 miles North of Callao, Utah for processing.

Mill GPS Coordinates: Latitude - 40° 0'40.36"N Longitude - 113°42'29.40"W

1.4 Prevention of Unnecessary or Undue Degradation

Protection of the environment is a major component of the BLM regulations for mining operations, which are set forth at 43 CFR 3809. BLM regulations address requirements for protection of the environment in terms of prevention of "unnecessary or undue degradation" which is set forth at 43 CFR 3809.1(a).

GRMs proposed activities are authorized by the General Mining Law of 1872, comply with applicable environmental laws and regulations, and employ current procedures, methods and standards for mining and environmental protection. Unnecessary or undue degradation is defined in 43 CFR 3809.0 5(1) as follows:

"...impacts greater than those that will normally be expected from an activity being accomplished in compliance with current standards and regulations and based on sound practices, including use of the best reasonably available technology."

BLM also sets forth the requirements to prevent unnecessary or undue degradation (43 CFR §3809.415):

...You prevent unnecessary or undue degradation while conducting operations on public lands by – (a) Complying with § 3809.420, as applicable; the terms and conditions of your notice o approved plan of operations; and other Federal and State laws related to environmental protection and protection of cultural resources...

In accordance with 43 CFR 3809.420, this Plan provides the required information to demonstrate that the proposed operations will not result in unnecessary and undue degradation of public lands.

1.5 Organization of the Plan

This Plan is organized to meet the general purpose and to provide information required for plans of operations for minerals set forth at 43 CFR Part 3809. The Plan contains the following sections:

- Section 1 Introduction
- Section 2 Operator Information
- Section 3 Proposed Mine Plan of Operations
- Section 4 Reclamation Plan
- Section 5 Monitoring Plan
- Section 6 Interim Management Plan
- Section 7 Reclamation Cost Estimate
- Section 8 Operational and Baseline Environmental Information
- Section 9 Period of Use/Occupancy for Surface Facilities

Sections 2 through 7 provide information required by 43 CFR 3809.401(b) and 43 CFR 3809.401(d).

Section 2 Operator Information

In accordance with 43 CFR 3809.401(b)(1), this section presents information about the operator of the mine, the location and legal description of BLM lands affected and proposed to be affected by the mining activities, and information regarding mining claims. A list of other local, state, and federal permits required for mine operations is also provided.

2.1 Mine Operator Information

The Fraction Lode, Fraction Lode #2, and Tuolumene mine are operated by GRM including project claims and other assets.

Name - Gold Rush Metals L.L.C.

Mailing address - HC 61 Box 190, Wendover, UT 84083

Phone Number - (435) 693-3225

Point of Contact - Jon Rush

Point of Contact Mailing Address - P.O. Box 212, Orderville, UT 84758

Point of Contact Phone Number - (435) 648-2741

Point of Contact Email address - bjrush@scinternet.net

Taxpayer Identification Number - 46-3919883

GRM will notify the BLM of any change in operator in writing within 30 days of such a change.

GRM would also like to make clear that we are only the operators. The following is the Claimant's information:

Name – Doris Timm

Address - 30 Hill Rd E, Kalmath CA. 95548

Phone Number - (707) 482-0406

2.2 Location and Legal Description

Mining operation locations are as follows:

- Fraction Lode (Township 7 South, Range 18 West, Section 26, Corners North West North West)
- Tuolumene claim (Township 7 South, Range 18 West, Sections: 22, 23, 26, and 27, Corners: South West South West, South East South East, and North East North East)

GPS coordinates of the mine are:

- Fraction Lode – Latitude 40°11'43.03"N, Longitude 113°50'57.31"W

These coordinates are marked as planned mine entrances.

Please see "Gold Rush Metals claims and road map" for details.

2.3 Surface Ownership within Area of Operations and Mining Claim Information

Currently, Gold Rush Metals L.L.C. holds leases on 2 unpatented claims, and 1 patented claim. The BLM serial numbers for these claims are:

- Fraction Lode - 78504
- Fraction Lode #2 - 78505
- Tuolumene – Patented 4386

2.4 Other Federal, State, or Local Authorizations

The following provides a list of permits or approvals that GRM has applied for the mine or that have been issued.

- Notice of Intent for Small Mining Operation from Utah Division of Oil, Gas, and Mining (DOGM) (Approved)
- Mine ID from Mining Safety and Health Administration (Approved)
- Explosives License (9-UT-025-33-5L-00487) from Bureau of Alcohol, Tobacco, Firearms, and Explosives (Approved)

Please see "Appendixes" in the table of contents for more detail on the permits/approvals.

Section 3 Proposed Mine Plan of Operations

3.1 Installation of Mine Infrastructure Systems

It is GRMs goal to provide an integrated mine infrastructure system at the mine. The quantities and types of equipment at the mine are subject to change depending on market conditions and other factors.

Here is the current list of equipment that will be used at the mine site:

- Diesel powered 275 kilowatt (kW) Caterpillar Generator will allow for power into the mine in a cost-effective manner.
- 14,000 Cubic Feet per Minute (CFM) Hartzell electrical Portal fan to provide ventilation for the mine
- 2 Yard Mucker for the hauling of both ore and waste rock from the mine
- Diesel over Hydraulic Drill
- 500 cubic feet per minute (CFM) Ingersoll Rand Screw Style Electric Air Compressor will be utilized and installed on the surface. Compressed air is used underground to power jack-leg rock drills and other mining equipment.
- 2 - 5,000 Gallon Water Tanks
- GMC Water Truck
- 3 - Kenworth Ten Wheel Bed Dump Semi Trucks
- CAT 953 Track Front End Loader
- John Deere 690 EL-C Tracked Excavator (temporary usage)
- 6 - Jack Legs
- 3 – 20' Storage containers
- 2 – Explosive magazines
- Chevy Silverado Service Truck

- 1,000 Gallon above ground self-contained Fuel Tank provided by Cardwell Fuel company.
- Porta-Potty
- Plus various other pieces of equipment such as but not limited to: scaling bars, vent bag, 2" Water lines, 6" Air lines, Electric lines, Prell guns, loading polls, safety flags, roofing bolts and screen, a variety of hardware, and hand tools.

All of the aforementioned equipment is mobile in nature to leave as little footprint on the claims as possible. The quantities and types of equipment are subject to change depending on market conditions, equipment availability, mining conditions, and other factors.

3.2 Mine Timeline

The following descriptions are the detailed construction plan of the Fraction Lode mine. The plan will be broken up into 3 phases.

3.2.1 Phase 1: Establish Mine Site

GRMs first phase of operation will be to establish new ground at the portal. GRM will dig a level channel from the face of the existing high-wall out to the north side of the old wooden ore chute and burying several steel-sets with any overburden or existing material within the pit area to eventually create better access for the removal and hauling of the ore from the mine site.

Overburden from the construction of the portal and adit, along with subsequent mining will be placed above on the constructed steel-sets creating a level area to be backfilled over time, reclaiming the existing pit. Any growth medium encountered during this phase of the operations will be saved and stored on the upper level of the mine site and kept for future reclamation. The porta potty will be set near the office trailer below the gate and the water-tight container (connex) will be set near the mine.

Using the disturbed surface on the upper level above the existing pit, GRM will create an area for the generator, water tank, compressor, shop and small parking lot for the employee and visitor parking. GRM will also set the explosive magazines and appropriate signage to the very far west of the disturbed area on the upper level.

GRM will then start to chain link the high-wall and cut rock on the face for safety purposes.

3.2.1.1 Access Road

Access to the mine from Gold Hill RD is by a BLM dirt road. GRM requests to widen the BLM dirt roads by 2 feet (total of 10 feet width). This width appears to be what the original road was when it was constructed for the earlier mining activities considering the overgrown berms on much of the existing road. Please see "Road Location Map" for details.

GRM will be improving the BLM dirt road from the county road to the mine-site. GRM will install 2-3 safety turnouts along the BLM road so vehicles may pass each other safely. The BLM road will also be upgraded with gravel, ditches, and waterbars. The road will be constructed and maintained to handle the type of vehicles associated with the mining activities of this project on a year round basis.

A lockable gate with signage will be installed at the Tuolumene patented mining claim to prevent public access to the mine area during operations. Access will be provided to BLM and DOGM personnel, and others that periodically need access to the area. For public safety purposes, access to the mine will continue to be restricted for the duration of mine operations. Public access will be restored once mining operations are completed.

3.2.1.2 Preparation of the existing Fraction Lode Portal

This will be accomplished by use of the CAT 953, John Deere 690 EL-C excavator, a 10 wheel Kenworth dump trucks, and GMC water truck. Explosives will be used to dislodge loose rock from the existing high-wall face to make the operation safe. The portal area and upper level will be leveled for ease of access.

3.2.1.3 Construction of temporary surface structures

The following temporary structures will be erected at the mine area:

- 3 20' connex storage containers
- 14'x 20' shop framed between connexs. The shop will be made of 2"x 6" wood boards. Nailed with 8 D nails. on 16" centers. The structure will be sheeted with 1/2" Plywood. The roof will be sheeted with Tin. The roofing will be screwed down with 3" roofing screws. The floor is made of 2"x 6" wood on 16" centers and sheeted with 2 layers of 1/2 " plywood. The door is made of 2"x "6 wood and uses 2" metal hinges. A metal door lock installed.

Please see "Fraction Lode Mine Site Layout & Ground Disturbance Map" for details.

3.2.1.4 Surface Equipment and utilities

The following equipment and utilities will be put at the mine area:

- John Deere 690 EL-C Tracked Excavator
- CAT 953 Front-End Tracked Loader
- Diesel powered 275 kilowatt (kW) Caterpillar Generator
- 500 cubic feet per minute (CFM) Ingersoll Rand Screw Style Electric Air Compressor
- 5,000 Gallon Water Tank
- GMC Water Truck
- 1,000 Gallon above ground self-contained Fuel Tank
- Plus Water lines, air lines, and electric lines

Please see "Fraction Lode Mine Site Layout & Ground Disturbance Map" for details.

3.2.2 Phase 2: Establishing Portal

First event of phase 2 is removal of the loose rock that was taken off the high-wall face. This rock will either be used as fill in the pit area or moved to the waste rock pile, and will be accomplished with the CAT 953 Track Front End Loader listed in 3.1.

The Portal for the Fraction Lode will be established at the north side of the old wooden ore chute by digging a trench from the face of the high-wall to the ore chute and constructing a series of steel-sets to create an artificial adit. Existing overburden within the pit area and waste rock will be used to level the surface above the adit and eventually fill in the existing pit as best as can be with the available material.

3.2.3 Phase 3: Commence Mining Operations

After the previous phases have been completed then operations of the mine can begin. Explosives will be used to create the loose ore and waste rock that will be extracted from the mine. GRM will follow the vein of ore material, moving forward by setting explosive rounds to dislodge more ore and further their mining operation. GRMs proposed mining operation will be removing an estimated 200 tons of ore per day, which comes to approximately 5 to 7 truckloads hauled to the mill every 24 hours.

3.2.4 Handling of Ore and Waste Rock

Ore will be removed from mine by Imco Mucker and placed onto the ore stockpile or directly in to a haul truck (see "Fraction Lode Mine Site Layout & Ground Disturbance Map" for ore pile.) using a 953 Cat loader for transport to the off-site processing facility.

Waste rock will be placed above the portal area to backfill the previously mined pit for future reclamation or placed on the designated waste rock pile depending on the characterization of the rock. (see "Fraction Lode Mine Site Layout & Ground Disturbance Map" for waste pile location.).

Prior to any waste rock from this mining operation being placed on BLM surface, GRM will pay for the sampling and testing of the waste rock through an independent laboratory approved by the BLM as per section 3.5 of this Plan.

3.2.5 Milling Procedure

Kenworth dump truck will dump ore in stock pile near Jaw Crusher. (see "Callao Mill Site Layout") 955 Cat Track Loader will size rock with Grizzly and load feed bin to feed Jaw Crusher. Jaw Crusher will discharge ½ inch minus rock into metal building. 955 Cat Track Loader will take ½ inch minus rock from metal building and place in feed bin for Cone Crusher feed belt. Feed belt feeds sizing screen, 3/8 plus rock will be returned to Cone Crusher, 3/8 minus rock will proceed to Mineral Jig. Mineral Jig produces concentrate which will be dried and bagged for shipping. From the Mineral Jig the remaining rock will pass over -30 mesh screen, everything +30 mesh will slide into Rod Mill to be crushed and returned to -30 mesh screen. Ore -30 mesh will pass through screen and be pumped to gravity separation table. All concentrate proceeds to dewatering screw then dried and bagged for shipping. All inert sand will be dewatered and stock piled on mill location.

3.3 Surface Disturbance

The proposed surface disturbance area for the Fraction Lode Mine is approximately 4.5 acres and 1 acre for the access road. This totals approximately 5.5 acres of disturbed land, although all of the proposed mining related activity will occur on previously disturbed BLM land, except for 600 feet of access road that crosses the Tuolumene patented mining claim.

3.4 Water Management Plans

The water management plan for the Mine consists of measures to be taken to avoid disturbances of existing natural drainage channels, minimize sedimentation, and minimize erosion. It is often difficult to foresee problems that require repair, but GRM will keep open communication with the BLM if any specific measures need to be implemented to avoid sedimentation and erosion.

MSHA required berms will be constructed on the sides of the access roads and will be monitored for erosion during the life of the mining activities.

3.5 Rock Characterization

Prior to placing any waste rock material from this mining operation on BLM land, GRM will have a certified independent laboratory approved by BLM sample and test the waste rock by EPA analytical method SW6020 (inductively coupled plasma mass spectrometry, ICP-MS) and method SW9045 (pH), to determine the characterization and pH of the rock. Placement of the rock on BLM land will be determined by testing results.

The sampling and testing of the mined waste rock will be conducted on a quarterly basis as long as waste rock is being placed on BLM land. BLM may increase or decrease the frequency of the testing depending on the consistency of the test results.

The ore was characterized by Western Environmental Testing Laboratories (WET Labs) on 2/27/2015, by EPA method SW846, to support planned National Environmental Policy Act analysis for the Mine. The purpose of the rock characterization study was to determine if the rock contains acid generating, deleterious materials, or various other harmful elements and to support development of an effective rock handling plan to meet performance standards set forth at 43 CFR 3809.420.

Please see "WETLabs complete rock analysis for fraction lode" in Appendixes for the complete rock characterization of the ore material.

3.6 Quality Assurance Plans

Quality assurance will be conducted during construction of the facilities at the mine. This will include monitoring the extent of proposed ore stockpile areas and waste pile(s) to facilitate construction and maintenance of drainage controls and allow for future reclamation in accordance with the reclamation plan.

3.7 Hazardous Materials/Spill Prevention Plan Solid Waste

GRM will be implementing measures to mitigate the storage of hazardous materials and the prevention of their spills. The plan provides measures and procedures for: handling and storing, predicting and controlling spills, preventive maintenance, transfer operations, personnel training, spill response, spill reporting, and periodic review and update of the plan.

Some examples on our spill prevention plan is to have cartons that will be provided for oil storage, and MSDS sheets will be available for all employees.

All fluids would be stored in original and labeled containers. Containers would be stored inside the secured facilities or in an approved cabinet or within a bermed area to assure any spilled material will be contained and will not enter the soil.

Any hazardous waste that is discovered to be spilled will be reported to BLM and the State, if in excess of reportable quantities (RQs) and removed by qualified individuals.

If any petro-chemical or hazardous fluid does contaminate the soil, it will be removed and disposed of at a proper waste disposal facility by qualified individuals.

Oils will either be stored in an approved container, or stored inside the water-tight storage container (conex).

A spill and leak reporting form and log, and an example inspection form, is kept on site during active operations for use by Gold Rush Metals personnel.

Employee education/training on the safe handling and storage of all hazardous materials will be conducted yearly.

Reporting any spills to a supervisor and filling out a form detailing the location and amount spilled.

3.7.1 Fuel Tank Spill Prevention

Measures to mitigate damage from any spills will be accomplished by installing a berm around the tank that is double the capacity of the fuel tank, per state and federal regulations.

3.7.2 Solid Waste

GRM will dispose of all solid waste generated from the mining operations conducted at their mining and milling sites at an approved waste disposal facility. At no time will GRM burn, bury or dispose of solid waste on BLM land.

3.8 Schedule of Mining and Operations

Typically, GRM operates on two 12-hour shifts seven days per week (24/7) with an estimate of 200 tons of material removed every 24 hours. Potential extended periods of non-operation is discussed in Section 6.

Any necessary areas within the mine including, but not limited to the portal area and the office trailer area will be illuminated during the night shift for the safety of the employees and any authorized visitors to the mine. It is anticipated that due to the topography and the remoteness of the mine area, there would be no "light pollution" generated from this activity.

3.9 Mine Access Roads and Utility Services

3.9.1 Access Roads

Access to the mine is via a year-round county maintained road, Upper Gold Hill RD and Gold Hill RD, and by non-maintained dirt roads. GRM plans to improve the haul road from the county road to the mine site with an all-weather, year-round road that will accommodate the size and weight of the haul trucks. Please see "Road Location Map"

A lockable gate with signage will be installed at the Tuolumene patented mining claim to prevent public access to the mine area during operations. Access is still provided to BLM personnel, and others that periodically need access to the mine. For public safety purposes, access to the Mine will continue to be restricted for the duration of mine operations. Public access will be restored once mining operations are completed.

3.9.2 Electrical and Water Utilities

The 275 Kilowatt (kW) generator listed in 3.1 is located at the Fraction Lode claim to provide power to the mine. Power will be conveyed within the underground mine to provide power to the underground vent fans.

Water is necessary to support the mining operation for general uses in surface facilities and for drilling and dust suppression in the underground mine. The surface facilities utilize water for dust control of the mine area and access roads and other general uses. Water is necessary in the underground workings to drill and to control dust during drilling, mining, and haulage activities.

There are 3 wells located at the Callao Mill. These wells draw water from approximately 12 feet from the surface. Water going to the Mine will be loaded onto a water truck and hauled daily to the Mine to be stored in 2 - 5,000-gallon water storage tanks.

Drinking water is provided by bottled-water systems at the mine. In the event that mine employment increases to 25 or more employees, a potable water system will be installed for bathrooms and showers, as required by state law. This system could be supplied by additional water storage tanks filled with water trucked from the Callao Mill.

Section 4 Reclamation Plan

The following sections describe GRMs plan to reclaim disturbed areas and surface facilities in accordance with DOGM and BLM regulations. This section conforms to the standards in 43 CFR Part 3809.420.

4.1 Drill and Vent Holes

No drill or vent holes will be made at the mine.

4.2 Grading and Reshaping

The following subsections present GRMs proposed plans for grading and reshaping of disturbed areas.

4.2.1 Road reclamation

All roads at the mine are pre-existing and will be reclaimed as per BLM and DOGMs requirements upon the closure of the mining operations. The requested 2 feet widening of the road, and road disturbances at the mine site will be seeded using the BLM and Utah Department of Oil, Gas, and Mining approved seed mix.

4.2.2 Slope Stability and Reclamation

Any slopes created by mining activities will be graded to achieve reclaimed slopes of 3H:1V or less steep, with the exception of the mine portals which will be graded to 2H:1V slopes. Compacted areas will be ripped on contour to a depth of 12 inches (in accordance with UAC rule R647-4-110.5(b)). Due to the existing surface disturbance from previous mining and the lack of suitable growth medium at the onset of this project, GRM, will contour any disturbed areas to a natural topography and spread any saved growth medium over the graded slopes and scarified on contour and seeded with the BLM and DOGM approved seed mix. Best management practices, such as stone check dams, silt fence straw waddles, or hay bales will be installed during reclamation to mitigate erosion until vegetation/stability has been established.

4.2.3 Mine Portal

The mine portal will be sealed by pushing waste rock 30 feet into the opening and then back filling additional material against the opening to create a 2H:1V slope. Material from the waste pile in the mine will be used for backfill within the portal. Surrounding material will be used to create the 2H:1V slopes. If any growth medium is available it will be placed over the final slope and seeded with the BLM and DOGM approved seed mix upon reclamation.

4.3 Final Deposition of Stockpiled Ore Materials

Any remaining ore in the stockpile will be shipped to the mill for processing if market conditions are favorable. If shipping the ore stockpile is not feasible, it will be placed underground within the mine prior to any waste rock that would be used for reclamation.

The ore stockpile area will be graded, ripped, covered with any available growth medium, and seeded with the BLM and DOGM approved seed mix.

4.4 Wildlife Habitat Rehabilitation

Land uses prior to this proposed mine disturbance included scheelite mining, recreation, and some wildlife habitat. The post-mining land use will be returned to recreation and wildlife on a natural landscape. A seed mix has been designed to reflect the species composition observed, but typically associated with the landscape, soil type, elevation, and precipitation of the resource management area.

4.5 Topsoil/Growth Medium Handling

Compacted areas will be ripped on the contour to a minimum depth of 12 inches prior to placement of any available growth medium. Growth medium will be placed as the final cover to the greatest extent practicable. This work will be accomplished using a dozer, front-end loader, excavator and trucks.

Based on the availability of any material that can be used as growth medium excavated during mining operations, GRM will stockpile the material for use during reclamation. Depending on the characterization of the waste rock, GRM may have to cover the waste rock areas with 18" of acceptable material for final reclamation.

Following the placement of any available growth medium, the surface will be roughened by scarifying the soil. Care will be taken on the waste pile to limit scarification to the growth medium and not penetrate the underlying waste rock. A roughened soil surface exhibits lower soil loss potential, increased moisture retention, cooler surface soil temperatures, and greater seed germination. Slopes of 3H:1V or less will be scarified on the contour of the reestablished post-mine topography using a tracked dozer.

4.6 Re-vegetation

The following sections describe GRMs procedures to reestablish vegetation and achieve a minimum of 70 percent of the pre-mining vegetative ground cover after reclamation activities. GRM will use a seed mix approved by the BLM and DOGM for all reclamation areas within the mine and access road areas.

4.6.1 Seed Bed Preparation

To minimize surface compaction and timelines of the initial seeding efforts in late fall, broadcast seeding will be conducted concurrent with surface scarification. Where the graded surface allows and the post-mine topography is determined to not be too steep, a tracked-dozer with rippers and broadcast seeder (or equivalent method) will be used to

seed along (parallel to) the contoured surface. Care will be taken to limit the depth of scarification to the upper growth medium layer.

4.6.2 Seeding Method

Seeding of all species will be achieved with broadcast applicator in late fall. This will allow for the advantage of a natural cold scarification of the seeds as well as sufficient moisture at the onset of germination. A flex or drag harrow, or similar method, will be used to lightly cover the seed with topsoil after broadcasting in all reclaimed areas that are accessible by mobile equipment. Hand rakes will be used to cover seed with 1/8 to ¼ inch of soil in small or steep areas where equipment access is limited.

4.6.3 Fertilization

No fertilizers are proposed to be used in the seeded areas. In areas where soils historically have exhibited nutrient limitations, and reclaimed soils continue to be low in plant-available nutrient content; the use of fertilizers has resulted in the proliferation of invasive species populations.

4.6.4 Irrigation

Irrigation will not be employed at the site. GRM will rely on precipitation for growth of vegetation in the seeded areas. Growth of new vegetation will be monitored and additional actions including reseeding or weed control will be taken if adequate growth has not occurred after two growing seasons.

4.6.5 Other Vegetative/Erosion Procedures

In conjunction with the reclamation activities described above, erosion control measures such as stone check dams, silt fence, straw wattles, and riprap will be installed in critical areas to minimize erosion.

GRM will mark areas where noxious weeds are found on the reclaimed areas and either a BLM approved spray or remove the weeds by hand. Weed identification and removal efforts will be documented and reported to the BLM and DOGM.

4.7 Removal or Stabilization of Buildings, Structures, and Support Facilities

No mine surface facilities will be left after reclamation of the mine. Trailers will be hauled to another facility, sold, or hauled to a landfill for disposal. Prefabricated buildings will be disassembled and reassembled at another facility, sold, or disposed of at an off-site landfill.

4.8 Post-Closure Management

After reclamation is completed, post-closure monitoring and maintenance is anticipated to take 3 to 5 years. Success and progress of vegetation efforts are dependent on seasonal growth patterns, precipitation, and weather patterns. Additional erosion control measures and seeding may be required during the post-closure period to meet BLM and DOGM reclamation standards. Vegetation success will be measured in accordance with UAC Rule R647-4-111 such that vegetation has achieved 70 percent of the pre-mining vegetative ground cover. In addition, the vegetation must survive three growing seasons following the last seeding. Vegetation will also be considered accomplished if the BLM and DOGM determine that the site is stable and vegetation work has been satisfactorily completed within practical limits. This provision of the rules is especially applicable to mine sites such as the Fraction Lode claims where historic mining activities have decreased the amount of salvageable growth medium.

In accordance with UAC Rule R647-4-113, GRM will maintain a surety bond for reclamation until the BLM and DOGM concur that reclamation is complete. GRM will notify the agencies to conduct an inspection upon completion of reclamation activities. A partial release of surety may be requested in the event that substantial phases or segments of reclamation such as demolition, backfilling, grading, and/or vegetation establishment has been successfully performed and the residual amount of retained surety is determined adequate to insure completion of reclamation. Annual assessments of reclamation progress and annual reporting will be conducted to inform BLM and DOGM of reclamation progress.

Section 5 Monitoring Plan

The following sections discuss GRMs proposed plan for monitoring the environmental effects of proposed operations at the mine. This section conforms to 43 CFR Part 3809.401, Section (b)(4).

5.1 Surface Water and Sediment Monitoring

Erosion control for the mine site and access road will be conducted in accordance with this Plan. Qualified personnel will inspect the stationary equipment, mine areas and access road on a monthly basis, at a minimum, during active mine operations and post-mining for compliance with the plans and specifications. Stormwater inspections will be performed biannually or during periods of temporary closure.

The monthly inspections may be done at any time during the month and preferentially following a precipitation event when drainage or sedimentation problems are generally more noticeable. Inspections are not required when adverse weather conditions, such as snow, make the site inaccessible. Biannual inspections are typically performed in late spring and fall.

All material handling areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. If there are any erosion and sediment control systems and/or devices, then they will be inspected to determine if they are working properly. Appropriate actions will be taken in response to inspections. Records of inspections will be maintained.

The access road will be inspected for evidence of, or the potential for, erosion and possible damage during and after weather events throughout the life of the mining operation.

In addition to inspections, follow-up maintenance will occur and be adequately documented in the inspection checklist. Follow-up maintenance includes maintaining equipment, the access road and mine site and repairing items that have been damaged by mining or construction activities, stormwater runoff, and or wind erosion.

A spill and leak reporting form and log, and an example inspection form, is kept on site during active operations for use by Gold Rush Metals personnel.

5.2 Fuel Storage Area Monitoring

In accordance with 40 CFR Part 112, GRM will perform regular external visual inspections for any oil spilled outside the tank, especially at seams, joints, and piping. Monthly and annual inspections of the facilities will be conducted. Precipitation that accumulates within the diked areas is visually inspected for oil sheen, and, if none is present, the water is allowed to evaporate or the water is removed. When the mine is on standby, fuels and other petroleum products will be removed from the site thereby eliminating the need for monthly inspections.

All logs and documentation of fuel unloading procedures are maintained by the person responsible for spill prevention. These records, as well as records of all inspections, will be kept filled in the office, and maintained for at least 3 years from the time of inspection.

5.3 Wildlife Monitoring/Mitigation

GRM employees will be cognitively aware and look for wildlife in and around the mine site and access roads and avoid intentionally harming wildlife at all times

GRM will adhere to any required federal or state law, policy or regulation for the protection wildlife resources within the area of their mining operation.

GRM will maintain records of on-site and transportation-related wildlife mortality if any occur and will contact the BLM authorized officer as soon as possible to report the incident.

In the event of a temporary shut-down or closure of the mine operations six months or longer, a biological survey will be conducted by a qualified biologist prior to the mine reopening to assure there would be no conflicts with migratory birds, TECS or any other wildlife in general.

Biological surveys for the areas of future disturbance(s), including future development areas that are not yet disturbed will be performed prior to construction when specific areas of future disturbance are identified.

5.4 Noxious Weed Monitoring

Weeds and invasive species are spread by a variety of means including humans (e.g., workers, hikers and recreationalists, etc.), vehicles, construction equipment, construction and reclamation materials, livestock, and wildlife. Implementation of preventive measures to control the spread of noxious weeds and invasive plants is the most cost-effective management approach.

The following preventive measures have been implemented and will be continued to prevent the spread of noxious/invasive plants during construction and future operations and maintenance activities:

- Prior to construction, GRM and its contractors will be trained on methods for cleaning equipment, identification of problem plant species in the project area, and procedures to follow when an invasive or noxious weed is located. To assist in identification, construction personnel will be supplied with a list and pictures of noxious and invasive species that may exist within the project area.

- Prior to any construction disturbance, all known noxious weed populations will be flagged so that they may be avoided.

- Prior to entering the project area, vehicles and equipment will be cleaned by manual methods or forced air of all mud, dirt, and plant parts where there is a potential to import weeds. This will be done to remove weed seed that may be attached to this equipment. Dry washing will occur at designated sites that include appropriate containment systems.

- Equipment, materials, and vehicles will be stored at specified work areas or construction yards. All personal vehicles, sanitary facilities, and staging areas will be confined to a limited number of specified weed-free locations to decrease chances of incidental disturbance and spread of noxious weeds and invasive plants.

- Disturbed areas will be promptly seeded following completion of activities to reduce the potential for the spread and establishment of noxious weeds and invasive plants. Seeding should occur as soon as possible following the disturbance activities and during the optimal time period. Only DOGM/BLM-approved mixtures of certified

"weed-free" seed will be used. All other introduced materials used for the mining activities, such as straw and fill, will also be certified weed-free.

- Should problematic weed infestation areas occur on site during any phases of the mining operation, GRM will confer with the BLM and the County regarding the appropriate control measures to be implemented.

Section 6 Interim Management Plan

This section conforms to the requirements of 43 CFR Part 3809.401, Section (b) (5). Mineral commodity markets tend to be cyclical, that is, prices rise and fall substantially over periods of years. In the Scheelite market for example, high prices in the late 1970s gave way to very low prices in the early 1990s, with spot prices falling below the cost of production for most mine. In 1996 spot prices recovered to the point that many mine could produce profitably, though prices soon declined again and only started to recover strongly late in 2003.

Given market conditions, temporary closure may occur, as it has in the past, due to the unpredictable market. In the past, these market fluctuations have led to closure of many scheelite mines in the U.S. In some instances scheelite mine were reclaimed prior to the exhaustion of recoverable resources. Interim management of the mine protects BLM lands from undue degradation during periods of non-operation.

In the event that market conditions or other circumstances require a temporary closure of mine operations, GRM will provide notice to the BLM in accordance with the requirements of 43 CFR Part 3802.4.7. During non-operating periods, GRM will maintain the project area and access road with the following:

Growth medium stockpiles will be seeded if not already stabilized and measures will be taken to ensure that the waste pile is stable and storm water controls are functioning.

In addition, earthen berms will be repaired prior to cessation and maintained as needed during the closure period.

6.1 Measures to Stabilize Excavations and Workings

The following measures will be used to stabilize excavations and workings.

6.1.1 Mine Portals

Mine portals will be gated and locked, or blocked with waste rock, during periods of temporary closure.

6.1.2 Gates and Signage

The signage and gates will remain in place and will be maintained by GRM

6.2 Measures to Isolate or Control Toxic or Deleterious Materials

Appropriate measures will be taken to control toxic or deleterious materials in the event of short-term temporary closure of mining operations. These measures are commensurate with potential environmental risks associated with these materials. No mineral processing is conducted at the mine. Therefore, neither mineral processing chemicals nor waste generated by mineral processing are present at the mine.

Generation of acid rock drainage is not expected due to the arid climate and the large excess of evaporation over precipitation in the project area. Stormwater control structures associated with the waste pile will be maintained during periods of temporary closure to mitigate potential erosion of waste rock.

Stockpiled ore will be removed from the mine during periods of temporary closure to mitigate potential erosion of ore. Ore may be stored in the mine during temporary closures to mitigate potential erosion of the ore.

6.3 Noxious Weeds

GRM will continue to manage noxious weeds at the mine site during any periods of temporary closure. If any noxious weed infestations are found at the Mine, the BLM will be notified and additional weed control measures will be implemented.

6.4 Provisions for the Storage or Removal of Equipment, Supplies, and Structures

Equipment and supplies at the Mine will be placed into locked storage boxes and within the locked and gated mine workings. No equipment and supplies will remain outside of mine buildings or outside of the workings. The locks and buildings will be monitored periodically and repaired in the event of damage due to vandalism or other causes.

6.5 Measures to Maintain the Project Area in a Safe and Clean Condition

Signage for speed limits on the gate and access limitations will remain in place at the mine sites and will be maintained. When temporary closure occurs at the mine, all equipment will either be removed from the site or placed inside locked buildings. Growth medium stockpiles will be seeded if not already stabilized and measures will be taken to ensure that the waste pile is stable and stormwater controls are functioning. In addition, earthen berms will be repaired prior to cessation and maintained as needed during the closure period.

6.6 Plans for Monitoring Site Conditions during Periods of Non Operation

This section meets the requirements of 43 CFR Part 3809.401(b) (4) , the establishment of a proposed plan for monitoring at the Mine during periods of non-operation. The mine facilities and surface structures such as buildings, portal, roads, sediment controls structures, and fencing will, as a minimum, be monitored on a quarterly basis during periods of temporary closure. Maintenance of facilities and stabilization structures and controls will occur at the mine site following monitoring activities and will be reported to the BLM. In addition, permits will be maintained and permit conditions will continue to be adhered to during temporary closure including environmental monitoring programs.

Section 7 Reclamation Cost Estimate

This section conforms to 43 CFR Part 3809.401, Section (d).

A reclamation cost estimate has already been submitted to the DOGM. GRM chose the 5 year escalation option and at the present time the estimated reclamation amount for the proposed mining operation is $55,700.00.

Attached is the reclamation cost estimate from the DOGM:

Small Mine Operation Bond Calculation Worksheet S/045/0093

3-year escalation (2017)

Item	Qty	Unit Cost	Total Cost
1st Acre Disturbance	1	$8,000.00	$8,000.00
Add'l Acres Disturbance	4	$5,000.00	$20,000.00
Mob/demob over 51-100 miles	0	$1,400.00	$0.00
Mob/demob over 101-150 miles	0	$2,500.00	$0.00
Mob/demob over 151-200 miles	6	$3,900.00	$23,400.00
Portal Closure	1	$2,000.00	$2,000.00
Shaft Closure	0	$3,000.00	$0.00
TOTAL (includes $2500 for BLM spot improvemnts)			**$53,400.00**

5-year escalation (2019)

Item	Qty	Unit Cost	Total Cost
1st Acre Disturbance	1	$8,300.00	$8,300.00
Add'l Acres Disturbance	4	$5,200.00	$20,800.00
Mob/demob over 51-100 miles	0	$1,400.00	$0.00
Mob/demob over 101-150 miles	0	$2,600.00	$0.00
Mob/demob over 151-200 miles	6	$4,100.00	$24,600.00
Portal Closure	1	$2,000.00	$2,000.00
Shaft Closure	0	$3,000.00	$0.00
TOTAL (includes $2500 for BLM spot improvemnts)			**$55,700.00**

AREA	Length (ft)	Width (ft)	Area (sq. Ft).
original area	440	440	193600
road	11,550	2	23100

Section 8 Operational and Baseline Environmental Information

Operational and baseline environmental information is presented in the following sections in accordance with 43 CFR 3809.401.

8.1 Air Quality

Airborne emissions at the Mine are controlled and monitored under the requirements of two regulatory Agencies, UDAQ and MSHA. All fugitive emissions, including airborne particulates, are regulated by permits issued by UDAQ. GRM will apply for an Air Emissions Permit that will establish controls for air emissions associated with the Mine including generators, vehicle travel on unpaved roads, ore and rock storage and handling, and other fugitive emissions. The permit will limit fugitive dust from truck haulage and loading operations to 15 to 20 percent visual opacity. Airborne particulates will be controlled by enforcing speed limits and spraying the haul roads with water. In addition, topsoil stockpiles and areas that will not be used for significant periods of time will be seeded to minimize erosion. GRM will provide a copy of the permit application and final permit to the BLM upon receipt.

The underground working environment, including air quality and dust exposure, is regulated by MSHA. MSHA inspects and regulates the overall safety of mining operations. GRM is required by MSHA to monitor and control particulate and dust exposure to workers at the mine. This program involves monitoring and control of dust within the working areas of the mine. In addition, GRM maintains a health and safety plan for mine workers that include ear protection, respirator policies, an evacuation plan, fire drills, and 40 hour MSHA training.

8.2 Cultural Resources

A cultural resources inventory was conducted by Bighorn Archaeological Consultants LLC in December of 2013. The result of that report documented 4 isolated finds that were not eligible for consideration. Those 4 isolated finds/site will be avoided during mining activities. Should cultural resources be discovered during any phase of mining activity including reclamation, all activity would cease and the AO would be contacted before any mining activity resumes.

Please see document "Cultural Study Bighorn"

8.3 Worker Health and Safety

Mining-related illnesses and injuries have steadily declined over the years because of stricter safety laws and improvements in mining machinery and practices. Although mine health and safety conditions have improved dramatically, worker health and safety at the mine can be affected by multiple work hazards, such as ground falls, explosives handling, scaling activities, roof bolting, drilling, dust and other respiratory issues associated with inadequate ventilation, and equipment handling and maintenance.

Dust generated by drilling in mine can still place miners at risk of developing silicosis from rock dust. The Federal Coal Mine Health and Safety Act of 1969, regulates dust concentrations in mine, and respirable dust levels are closely monitored. Dust concentrations in mine have declined as a result. Underground miners have the option to have their lungs x-rayed when starting a job, with a mandatory follow-up x-ray 3 years later, in order to monitor any development of respiratory illness. Additional x-rays are given every 5 years, on a voluntary basis (MSHA 2012).

The Operator will conduct monitoring and inspection programs responsive to the requirements of MSHA to protect worker health and safety.

8.4 Transportation

Ore extracted from the Mine will be hauled to the off-site processing facility (Callao Mill) near Callao, Utah for processing.

The Ore will be hauled by the Kenworth Ten Wheel Bed Dump Semi Trucks listed in section 3.1. The capacity of the Kenworths will be 40 tons, and GRM will be removing an estimated 200 tons of ore per day. Therefore GRM estimates an average of 7 truckloads being hauled from the mill to the mine and back.

The mine is expected to employ 5 miners and support personnel during the early stages of operation. No on-site accommodations will be provided; employees will be housed at the Six Mile Ranch, 20 miles from the mine site, or in other local area communities.

GRM estimates a total of 20 to 40 employees at the mine. The mine will operate on two 12 hour shifts 7 days per week. Based on this information, it is likely that most traffic will occur Monday through Sunday and an estimated 6 passenger vehicles will travel to the Mine (total) during two times of the day (e.g. accounting for two shifts).

Section 9 Period of Use/Occupancy for Surface Facilities

The Surface Resources Act of July 23, 1955, and associated regulations at 43 CFR 3715 authorize surface occupancy of unpatented mining claims for ''prospecting, mining, or processing operations and uses reasonably incident thereto''. GRM activities at the Mine are focused on prospecting and mining, including any signage, buildings and fences.

Mineral processing is not conducted at the mine. GRM also conducts activities that are reasonably incident to prospecting and mining such as operation of surface support facilities for underground mining operations.

GRMs existing occupancy of BLM land is in accordance with 43 CFR 3715.2 and meets the following requirements:

(a) *Be reasonably incident;*
(b) *Constitute substantially regular work;*
(c) *Be reasonably calculated to lead to the extraction and beneficiation of minerals;*
(d) *Involve observable on-the-ground activity that BLM may verify under §3715.7; and*
(e) *Use appropriate equipment that is presently operable, subject to the need for reasonable assembly, maintenance, repair or fabrication of replacement parts.*

Surface occupancy in association with prospecting, mining and reasonably incident uses will continue for the life of the mine complex. The current life of the mine is estimated at 10 years; however, results of future exploration, market conditions, and other factors may extend the life of the mine.

Unnecessary or undue degradation of the public lands and resources will be prevented or avoided during use and occupancy. Use and occupancy conforms to the applicable Federal and State environmental standards and necessary local, state and federal permits will be obtained, as required under 43 CFR 3800. Permanent and temporary structures on public lands conform with applicable State and local building, fire, and electrical codes and occupational safety and health and mine safety standards.

Glossary/Acronyms

AO – Authorized Officer

Berm - A level space, shelf, or raised barrier separating two areas. It can serve as a border barrier.

Grizzly - A machine with a series of parallel rods or bars for crushing rock and sorting particles by size.

Growth Medium - Any material that may contain enough nutrients, organic material, or any other natural substance possibly mixed with soil to aid in the growth of new vegetation.

Overburden - (also called waste or spoil) The material that lies above an area of economic or scientific interest. In mining, it is most commonly the rock, soil, and ecosystem that lies above a coal seam or ore body

Soil - The mixture of minerals, organic matter, gases, liquids, and the myriad of organisms that together support plant life.

Subsoil - The layer of soil under the topsoil on the surface of the ground.

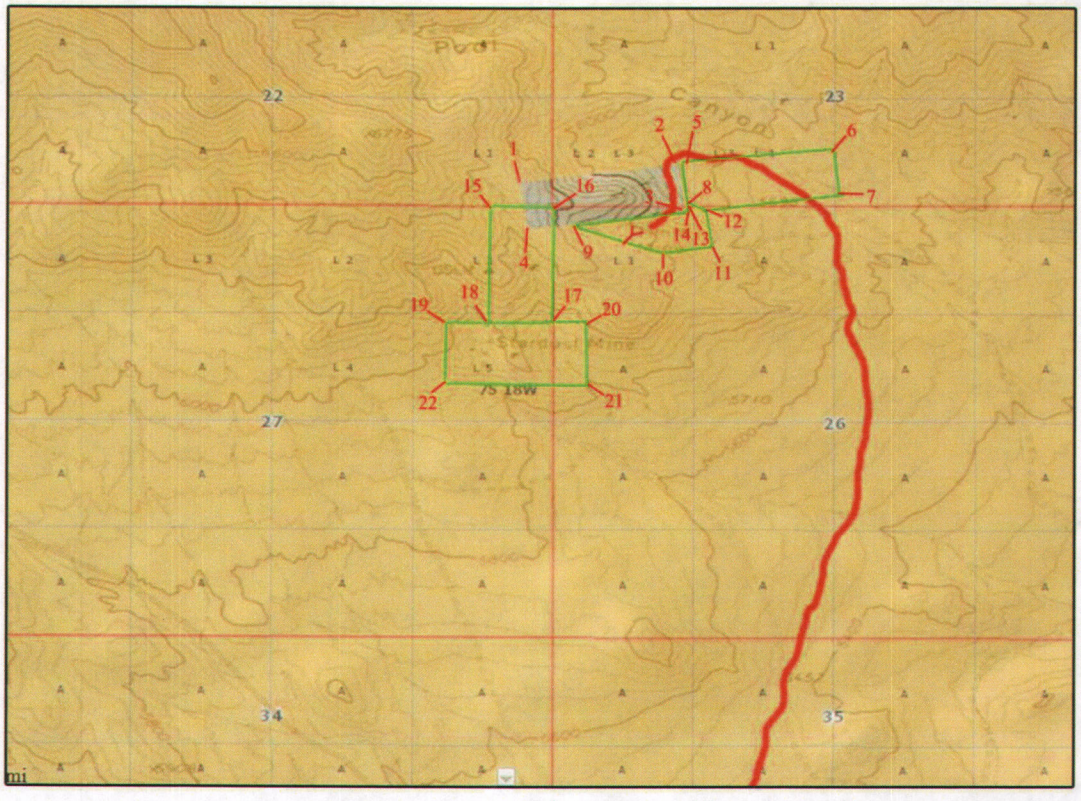
Tailings - Also called mine dumps, culm dumps, slimes, tails, refuse, leach residue or slickens,[1] are the materials left over after the process of separating the valuable fraction from the uneconomic fraction (gangue) of an ore. Tailings are distinct from overburden, which is the waste rock or materials overlying an ore or mineral body that are displaced during mining without being processed.

Top Soil - The upper, outermost layer of soil, usually the top 2 inches (5.1 cm) to 8 inches (20 cm). It has the highest concentration of organic matter and microorganisms and is where most of the Earth's biological soil activity occurs.

Waste Rock - Rock that does not contain Scheelite or contains Scheelite in such low concentrations that it cannot be economically processed.

Illustrations

Claims and Road Map



Legend:

- Mine Road
- Claim Borders
- Mine Portal
- BLM Property
- Private Land

0 1/4 1/2 Mile

N W E S

Utah

Coordinates:

1 -12T 0257116 m E 4453526 m N 40.196983 o -113.853435 o
2 -12T 0257576 m E 4453579 m N 40.197593 o -113.848057 o
3 -12T0257599 m E 4453396 m N 40.195952 o -113.847719 o
4 -12T 0257137 m E 4453342 m N 40.195333 o -113.853119 o
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16 - 12T 0257216 m E 4453413 m N 40.195995 o -113.852219 o
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18 - 12T 0257034 m E 4452972 m N 40.191974 o -113.854188 o
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21 - 12T 0257310 m E 4452755 m N 40.190101 o -113.850868 o
22 - 12T 0256854 m E 4452761 m N 40.190023o -113.856221 o

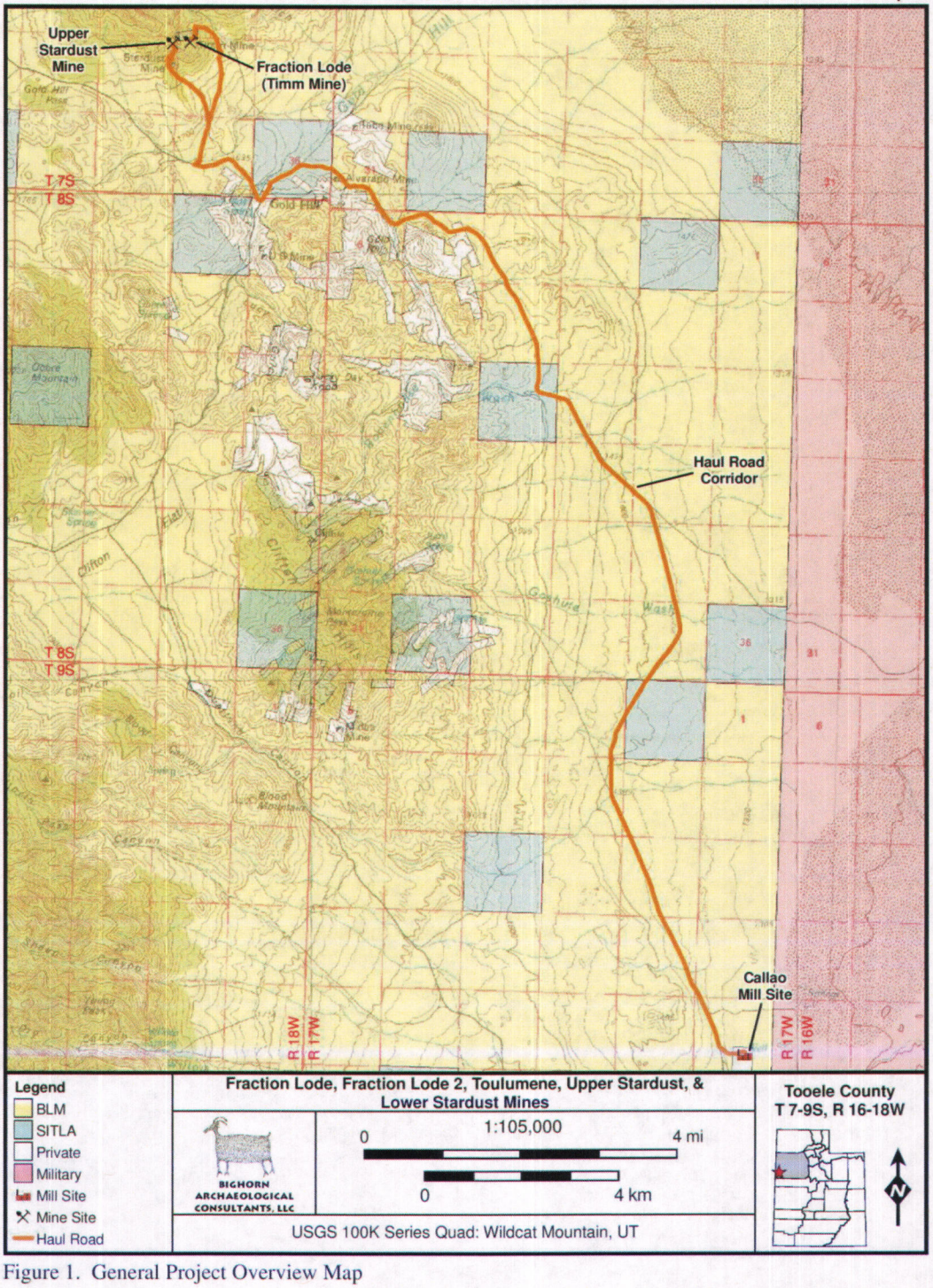

Figure 1. General Project Overview Map

Road location Map

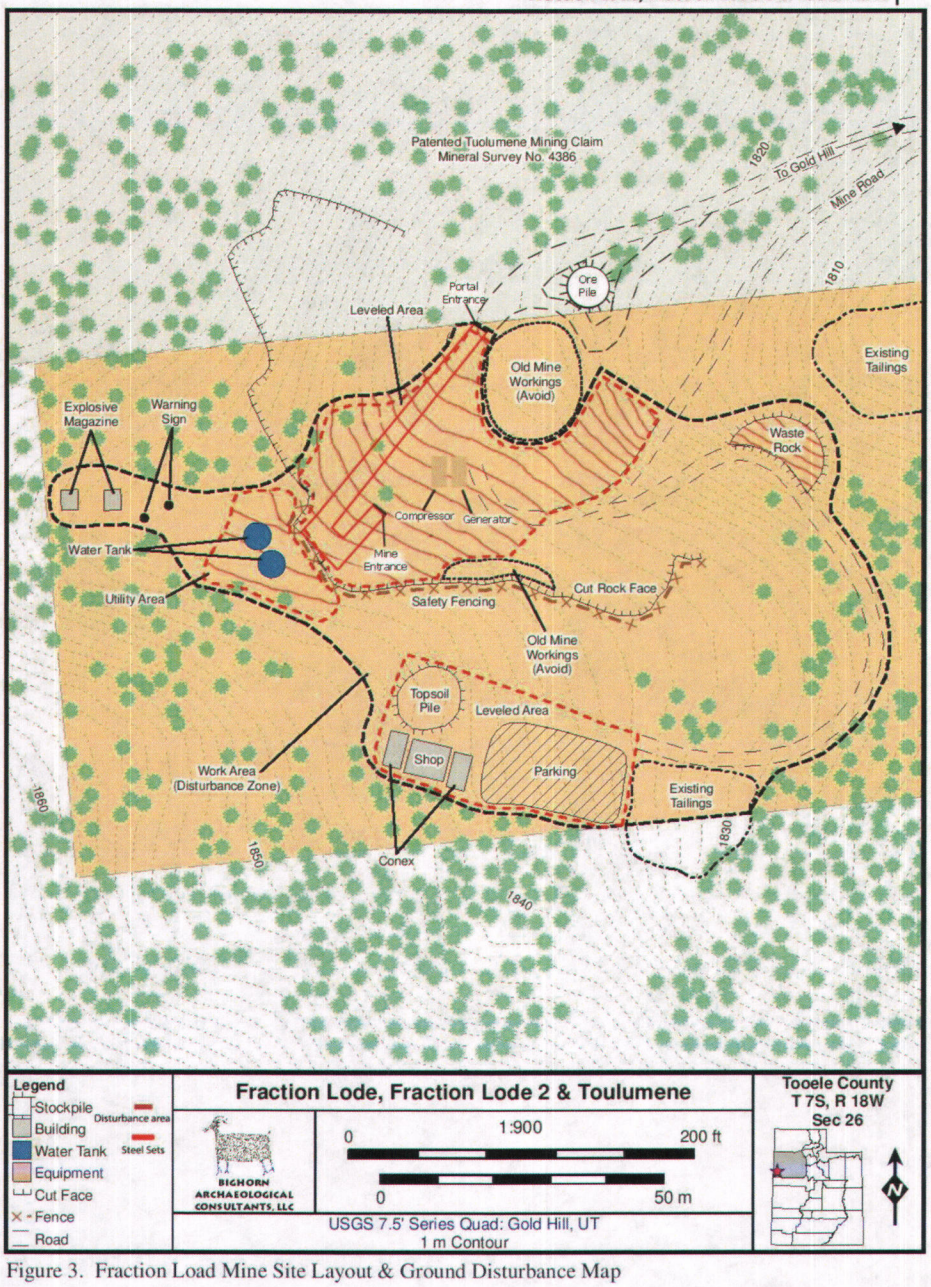

Figure 3. Fraction Load Mine Site Layout & Ground Disturbance Map

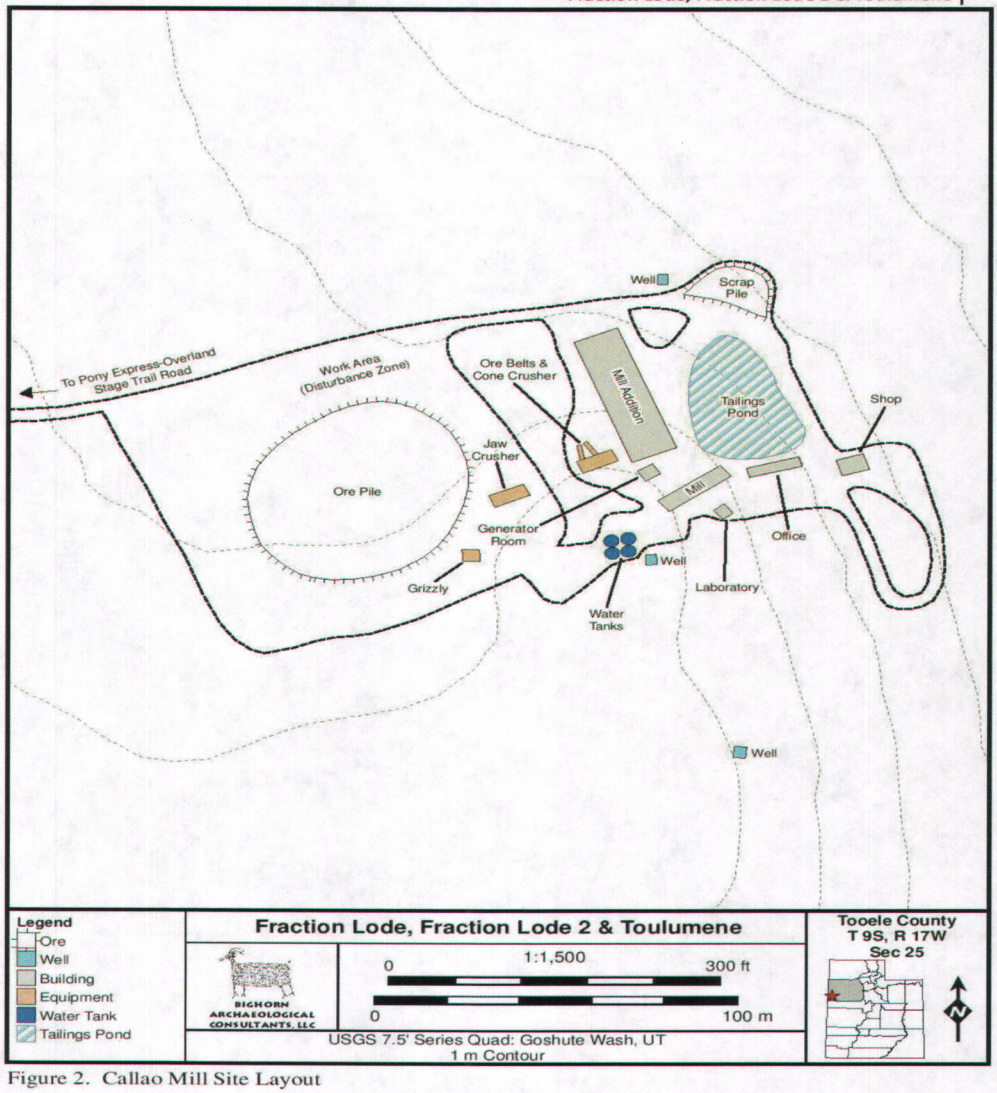

Figure 2. Callao Mill Site Layout

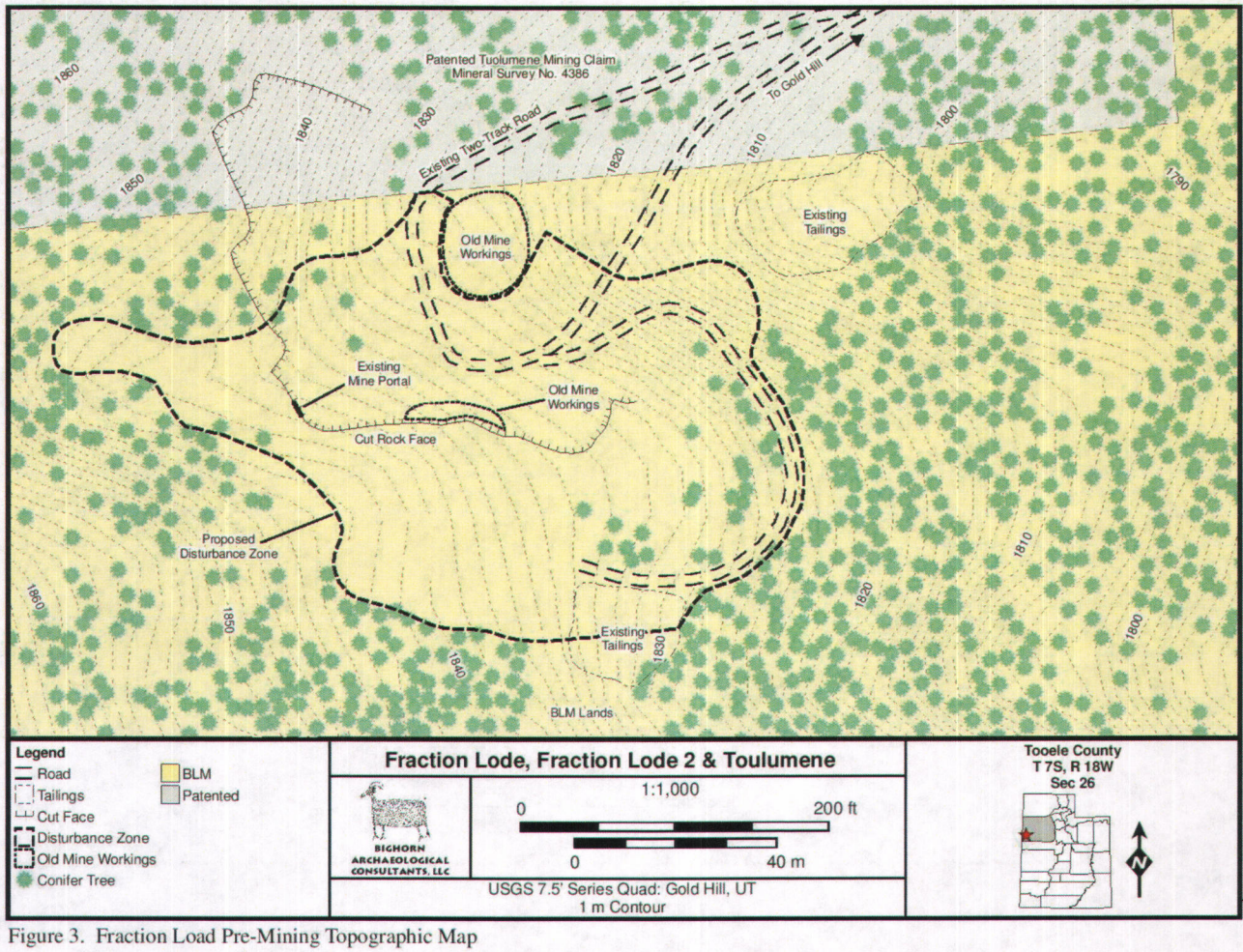

Figure 3. Fraction Load Pre-Mining Topographic Map